

# Converting Colors

XYZ(33.8029, 21.7690, 1.6730)

Have a look what the booklet for  
XYZ(33.8029, 21.7690, 1.6730)  
contains.

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# Color

**XYZ(33.9938, 21.8924,  
2.4340)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	E15100
RGB	225, 81, 0
RGB Percent	88%, 32%, 0%
CMY	0.1176, 0.6823, 1.0000
CMYK	0.00, 0.64, 1.00, 0.12
HSL	22°, 100%, 44%
HSV	22°, 100%, 88%
XYZ	33.9938, 21.8924, 2.4340
YIQ	114.8220, 111.8250, 5.3370

# Conversions

## Conversions Part 2

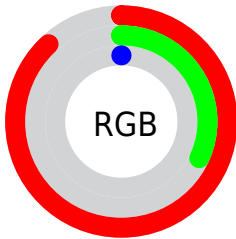
<b>Format</b>	<b>Color</b>
<b>RYB</b>	225, 127, 0
Decimal	14766336
CIELab	53.91, 53.57, 64.20
CIElCh	54, 83.612, 50.159
Yxy	21.8924, 0.5829, 0.3754
Android (android.graphics.Color)	4292956416 (0xFFE15100)
YUV	114.8220, -56.6072, 96.6261
Hunter-Lab	46.7893, 47.8041, 29.6682

# Details

The XYZ color **33.9938, 21.8924, 2.4340** is a dark color, and the websafe version is hex **CC3300**. The color can be described as dark washed red. A complement of this color would be **23.5631, 25.3812, 74.8908**, and the grayscale version is **16.3853, 17.2386, 18.7728**.

A 20% lighter version of the original color is **50.9414, 39.2272, 9.5893**, and **14.9308, 8.0428, 0.7655** is the 20% darker color. If you saturate the color by 10%, you get **33.9940, 21.8932, 2.4341**, and if you desaturate by 10%, it is **35.3300, 24.3255, 3.6180**.

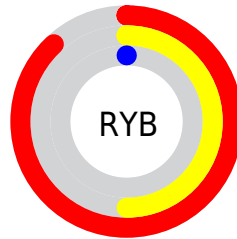
# Distribution



Red (88%)

Green (32%)

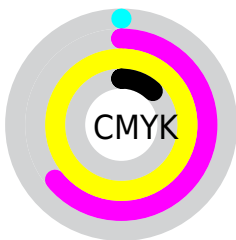
Blue (0%)



Red (88%)

Yellow (50%)

Blue (0%)

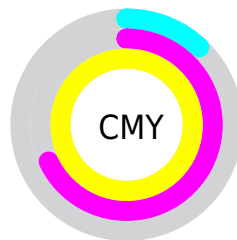


Cyan (0%)

Magenta (64%)

Yellow (100%)

Black (12%)



Cyan (12%)

Magenta (68%)


Yellow (100%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 33.9938, 21.8924, 2.4340 changes by changing the brightness by 10 percent. The first figure shows a shift by +10% for each color and the second figure -10%.


Similar to the brightness gradients but the following saturation gradients show a change of the XYZ color 33.9938, 21.8924, 2.4340 by changing the saturation by 10% instead.





 33.9938, 21.8924,  
2.4340


 33.9938, 21.8924,  
2.4340


311.6908,  
261.9838, 128.7887


 23.0517, 13.7779,  
0.8049


 65.2684, 46.5681,  
10.1966


 14.7526, 7.9663,  
0.0000


 86.3316, 63.8980,  
17.1757


 8.7311, 4.0734,  
0.0000


 111.4992, 85.0686,  
26.7782

 4.6219, 1.7147,  
0.0000

 141.1366,  
110.4641, 39.4224

 2.0596, 0.4332,  
0.0000

 175.6090,  
140.4690, 55.5271


 0.6671, 0.0000,  
0.0000


 215.2820,


 0.0000, 0.0000,


175.4676, 75.5106


0.0000


 260.5208,  
215.8445, 99.7917


 33.9938, 21.8924,  
2.4340


 33.9938, 21.8924,  
2.4340


 33.9940, 21.8932,  
2.4341

 35.3300, 24.3255,  
3.6180

 37.0801, 27.3074,  
5.7996

 39.3131, 30.8861,  
9.2795

 42.0725, 35.0972,  
14.2308

 45.3961, 39.9729,  
20.7998

■ 49.3177, 45.5429,  
29.1146

■ 53.8680, 51.8349,  
39.2904

■ 59.0757, 58.8747,  
51.4326

■ 64.9674, 66.6872,  
65.6383

# Harmonies

## Analogous

The Analogous color harmony consists of three colors that are next to each other on the color wheel.



41.6698, 21.8924, 10.5033



33.9938, 21.8924, 2.4340



23.9110, 21.8924, 0.7391

# Triad

The Triadic color harmony groups three colors that are evenly spaced from another and form a triangle on the color wheel.



33.9938, 21.8924, 2.4340



7.9829, 21.8924, 16.3244



27.3659, 21.8924, 107.3046

# Complementary

The Complementary color scheme is a pair of colors which are on the opposite of each other on the color wheel.



33.9938, 21.8924, 2.4340



23.5631, 25.3812, 74.8908

# Split Complementary

Split-complementary colors differ from the complementary color scheme. The scheme consists of three colors, the original color and two neighbors of the complement color.



17.9859, 21.8924, 113.7229



33.9938, 21.8924, 2.4340



8.4161, 21.8924, 45.3438

# Square

The Square scheme is like the rectangle color scheme, but the four colors are evenly spaced on the color wheel.



33.9938, 21.8924, 2.4340



10.1412, 21.8924, 4.0884



11.5673, 21.8924, 85.8103



37.1413, 21.8924, 71.8308



# Rectangle

The Rectangle color scheme consists of four colors that form a rectangle on the color wheel.



33.9938, 21.8924, 2.4340



17.9002, 21.8924, 0.7447



11.5673, 21.8924, 85.8103



24.0149, 21.8924, 113.5876

# Sweetspot

The Sweet Spot groups the original color and five complimentary colors.



33.9943, 21.8937, 2.4343



71.4077, 68.6574, 51.8718



36.2591, 18.0907, 28.8775



14.7143, 13.9125, 9.8129



0.0000, 0.0000, 0.0000



20.3446, 21.4041, 23.3091



# Same Dimension

The Same Dimension uses a secret algorithm to generate beautiful new colors.



33.9943, 21.8937, 2.4343



45.0505, 28.8809, 3.2002



49.7366, 53.3783, 7.6818



14.1091, 14.5042, 14.3627



19.6900, 12.8179, 1.4363



1.4476, 1.0542, 0.1272

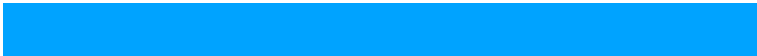


# Inverse Universe

The Inverse Universe completely reimagines the original color for something new.



23.5631, 25.3812, 74.8908



31.1814, 33.4829, 99.4271



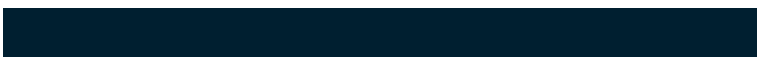
14.1556, 6.5663, 71.7550



13.6799, 14.6989, 17.5038



13.6925, 14.8545, 43.1939



1.0330, 1.1975, 3.0219



# Previews

## White Background



This preview shows how the XYZ color 33.9938, 21.8924, 2.4340 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA × Fail

Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail



# Black Background



This preview shows how the XYZ color 33.9938, 21.8924, 2.4340 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA × Fail

If you want to check with other color combinations, try the [Color Contrast Checker](#).

**XYZ 33.9938, 21.8924, 2.4340**

## **Background**



This preview shows how black text looks on a background with the XYZ color 33.9938, 21.8924, 2.4340.



This preview shows how white text looks on a background with the XYZ color 33.9938, 21.8924,



# Color Blindness Simulation

Color vision deficiency is a very complex topic, and I could not describe the different causes any better than Wikipedia does, so if you want to learn more, you should check out their [article about color blindness](#).

## Dichromacy



### Original Color

33.9938, 21.8924, 2.4340

### Protanopia

19.9913, 22.1381, 4.0300

### Deuteranopia

22.1872, 21.9524, 3.0679



## Tritanopia

35.6426, 21.9422, 9.9461

# Trichromacy



## Original Color

33.9938, 21.8924, 2.4340

## Protanomaly

23.5596, 20.7368, 3.2128

## Deuteranomaly

25.6123, 21.1642, 2.7352

## Tritanomaly

34.6154, 21.7155, 5.4990

# Monochromacy



## Original Color

33.9938, 21.8924, 2.4340

## Achromatopsia

16.2955, 17.1441, 18.6699

## Achromatomaly

19.5704, 17.1501, 8.5822

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 33.9938, 21.8924, 2.4340 is called "color". The color property can be set on classes, ids or directly on the HTML element.

This example shows how text in the color `rgb(225, 81, 0)` looks like.

```
.text, #text, p{  
    color:rgb(225, 81, 0)  
}
```

If you want to add a text shadow in that color use the text-shadow property, you can generate a text shadow directly with our [CSS Text Shadow Generator](#).

Here you see how black text with a 4 pixel rgb(225, 81, 0) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(225, 81, 0) }
```

## Border

The CSS property to change the border of an element to XYZ 33.9938, 21.8924, 2.4340 is called "border". The border property can be set on classes, ids or directly on the HTML element.

This example shows the color as border, it can be applied via the CSS property "border" or "border-color".

```
.border, #border, table{ border:4px solid rgb(225, 81, 0) }
```



If only the border color should be changed use the property border-color.

```
.border{ border-color:rgb(225, 81, 0) }
```

If you want to add a box shadow in that color use:

Here you see how a box with a 4 pixel rgb(225, 81, 0) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(225, 81, 0); -webkit-box-  
shadow:4px 4px 4px 4px rgb(225, 81, 0);  
box-shadow:4px 4px 4px 4px rgb(225, 81, 0)  
}
```

# Background

The CSS property to change the background color of an element to XYZ 33.9938, 21.8924, 2.4340 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(225, 81, 0) }
```

If only the background color should be changed can be used:

```
.background{ background-color: rgb(225, 81,  
0) }
```

This example shows the color as background, it is applied via the CSS property "background".

To optimize and compress your CSS code, you can use our [online CSS compressor and optimizer](#) based on csstidy. If you want to create a linear or radial gradient as background or border, check our [CSS Gradient Generator](#).

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